

## P a t e n t   c l a i m s :

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1. An optical element (1; 11; 21; 31; 41; 51; 61; 71; 81) in the form of an at least partially transparent face that comprises both transparent areas and essentially non-transparent areas, **c h a r a c t e r i s e d** in that

- the transparent areas are arranged sufficiently close to each other for the individual, intermediate, essentially non-transparent areas to be essentially invisible to the naked eye, at least when the element is viewed from a given distance that corresponds, however, at most to distances within an indoor-facility; and
- the essentially non-transparent areas are arranged sufficiently close to each other and have a sufficient extent at right angles to the face for the intermediate, transparent areas to have a depth/width ratio that causes the optical element to allow, at a given point on the face, passage of light with given angles of incidence, while light having other angles of incidence are unable to pass through the optical element at the point in question.

2. An optical element according to claim 1, **c h a r a c t e r i s e d** in that said essentially, non-transparent areas constitute a continuous face, such that the transparent areas appear as openings (2; 12, 13) in this face.

3. An optical element according to claim 2, **c h a r a c t e r i s e d** in that said openings are elongate, whereby they have, in a given direction in the plane of the face, an extent that considerably exceeds the extent in a direction at right angles thereto in the plane of the face.

4. An optical element according to claim 1, **c h a r a c t e r i s e d** in that said transparent areas constitute a continuous face, such that the essentially non-transparent areas appear as islands (22) in this face.

5. An optical element according to any one of claims 1 through 4, characterised in that the transparent areas and the essentially non-transparent areas are arranged in a mutually regular pattern.
- 5 6. An optical element according to any one of claims 1 through 5, characterised in that the individual transparent areas have, at least in one direction in the plane of the face, an extent that is as a maximum ten times the extent of the essentially non-transparent areas at right angles to the face.  
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7. An optical element according to any one of claims 1 through 6, characterised in that the transparent areas are arranged such that the individual, intermediate, essentially non-transparent areas have an extent that is, at least in one direction in the plane of the face, less than 10 mm.  
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8. An optical element according to claim 7, characterised in that the transparent areas are arranged such that the individual, intermediate, non-transparent areas have an extent that is, at least in one direction in the plane of the face, smaller than 1 mm.  
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9. An optical element according to claim 8, characterised in that the transparent areas are arranged such that the individual, intermediate, essentially non-transparent areas have an extent that, at least in one direction in the plane of the face, is less than 100  $\mu\text{m}$ .  
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10. An optical element according to any one of claims 1 through 9, characterised in that the essentially non-transparent areas consist of a material with a low reflectivity, such that light is only to a limited extent reflected from the surfaces of the essentially, non-transparent areas.  
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11. An optical element according to any one of claims 1 through 10, characterised in that that it is configured as a film that

can be attached to a surface on another, at least partially transparent optical element.

12. An optical element according to any one of claims 1 through 10,  
5 characterised in that it is configured as an integral part of a pane.

13. An optical element according to any one of claims 1 through 12,  
10 characterised in that at least a part of the essentially non-transparent areas are configured for functioning as electrode (67; 76) in a solar cell (61; 71).

14. An optical element according to claim 13, characterised in that said solar cell (61; 71) is a photo-electro-chemical solar cell.  
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15. An optical element according to claim 14, characterised in that the essentially, non-transparent areas comprise a semiconductor, on which a suitable dye is adsorbed, and are configured for functioning as photo-electrode (67).  
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16. An optical element according to claim 14, characterised in that the essentially non-transparent areas comprise electrically conductive particulate material and are configured for functioning as a counter electrode (76).  
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17. An optical element according to any one of claims 1 through 12, characterised in that the essentially, non-transparent areas comprise surfaces (86) that are configured as solar cells.  
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18. An optical element according to claim 17, characterised in that said solar cells (86) are configured as thin-film solar cells.